# Day 1, Panel 1 - Mobile news: How journalism is adapting to the new tablet computers, e-readers and smartphones

#### Moderator/Chair:

**Joshua Benton,** Director, Nieman Journalism Lab at Harvard University

#### Panelists:

**John-Henry Barac**, Digital Designer / Consultant to *The Guardian* (London UK) for iPhone App

**Tom Bodkin,** Assistant Managing Editor, Design Director, *The New York Times* 

**Dan Treinish**, Director of Content Acquisition and Business Development, Skiff

Kinsey Wilson, Senior Vice President and General Manager, NPR

Joshua Benton: ...@Nieman Lab. Since people know people in this room better by Twitter handles than by their real names in all likelihood. Thanks to Rosental for inviting me here. It's a wonderful opportunity to... I guess I'll just do it from here since that's working over there. It's a very important topic that we've been asked to discuss here today, and that is mobile news. You know, the official "How journalism is adapting to the new tablet computers, e-readers and smartphones." Those are, of course, new to varying degrees, since we've had a few years of experience on smartphones at this point.

So let me just start off with a quick survey. I'm going to give a quick overview and then we'll move to our very esteemed panel of presenters. So raise your hand if you have used the Internet at all today. [laughter] OK. All right. Raise your hand if you breathed this morning, you know. OK. Raise your hand if you have used the Internet or accessed the Internet in any way via a phone today. Yeah. How about, has anyone done so on an iPad or something like an iPad? OK. All right. [some laughter] Apple shareholders should take note of that last show of hands.

Mary Meeker, the longstanding Internet analyst said earlier this week that she projected that global mobile Internet use would pass desktop Internet use by 2015. Which 2015, when I hear that, I still think of that as being in the far distance, but that's actually not that far away at this point. And the shift from desktop and laptop Internet access to more mobile Internet access is moving in one direction, but at various rates among different communities. In the developing world, of course, cell phones are often the only access

point that many people have to the Internet. And in the United States, African-Americans and Hispanics are both substantially more likely to use mobile Internet than whites are. There's a Pew study last year that found that 17% of whites said they had used the mobile Internet yesterday versus 29% for both African-Americans and Hispanics. I'm sure all those numbers have gone up since that survey was taken. And of course that's not even to mention the age factor of younger users being substantially more likely to use their phones for the Internet and for everything else than older folks like me in their thirties. And of course the shift to smartphones has now been joined by the first substantial and usable really moves into the touchscreen tablet market like the iPad. Of course, touchscreen tablets have been around for a while. They just haven't been typically good. I can say I was one of those idiots standing in line at the Apple Store on the day that the iPad was announced. [laughter] Yeah. Or was first on sale. I showed up at 5:30 in the morning thinking there would be a long line. I was like number eight in line. [laughter] It wasn't too bad. But I have to say having used it for the last several weeks, it's pretty great. I've been surprised personally the degree to which my Internet use has shifted to this device.

Anyway, I'm just going to speak very quickly about some of the big questions in this space. Then, as I said, we'll hear from our panelists. I think there are three big questions that news organizations are grappling with when it comes to this mobile landscape. The first one is, what are the most important platforms to be on? Where does the investment — where should the investment go? You know, creating a mobile website that can work on a small screen is one thing. That's something where a relatively small amount of investment can have benefits over a large number of devices. But still, you know, resources can be pulled in a lot of different directions by the fractured nature of mobile platforms. In the United States, the Blackberry is still the best-selling smartphone, but the iPhone is right on its heels. And iPhone users are fundamentally different from Blackberry users in any number of ways, you know, often the political parties they vote for. But iPhone users use the web from their phones seven times as often as Blackberry users. And then there's Android, Google's entrant to the space, which by at least some measures is catching up pretty rapidly in mobile web traffic and Windows Mobile, and whatever happens to Palm and any number of others. And once you get outside the United States, there's Symbian and a variety of other platforms.

But you obviously don't just look at websites on mobile devices. You also, you know, spend your time in apps. It's an area that iPhone dominates, but with Android catching up. There have been very few news organizations that have invested in Android applications. I tried to look in the Android market a couple of days ago to try and track down as many as I could, and I could only find a handful, if that. Then, of course, there's the iPad. Wired.com reported yesterday that for the month of April, 23% of its mobile web traffic was coming from the iPad. Twenty-three percent was coming from the iPad. Now that only added up to about one percent of the site's overall traffic,

because mobile is still a relatively small fraction, but it's an interesting early bellwether of the kinds of use patterns that we're seeing with these devices. Anyone who's looked at the iPad apps that have come out from news organizations, there's a lot of interesting work in user interface, in navigation, and the presentation of story choices and of stories themselves. That's one thing I hope John-Henry is going to talk about.

The second big question that I think mobile presents is, how do mobile devices change the world of online advertising? Mobile advertising numbers have been on a rocket ship up north for some years now. It's from a very small base, so the numbers keep increasing by very large percentages. But a lot of people haven't been very happy with the effectiveness of mobile advertising. When you limit it to transferring the old banner ad model, which wasn't particularly effective in a lot of ways, on websites to devices and mobile advertising, it hasn't worked all that well. Apple just announced the iAd platform for the iPhone and the iPad, which has the promise of creating new immersive, high-quality experiences that hopefully someone will be willing to pay for--advertisers, that is. What I thought was interesting about that is Apple has announced that they are going to be helping companies create — [help] those advertisers create those ads themselves, which I think speaks to the general need of news organizations or others to help guide along advertisers as they make this transition, particularly for those folks in local markets. The capacity for development of good mobile advertising may not be particularly high among your local businesses. On the iPad, we've seen lots of interesting attempts at new advertising models. The Wall Street Journal app includes single story sponsorships with interstitials in a way that I actually think kind of works in a way that interstitial advertising has always been a great annoyance online. The New York Times has gone to a very print-like display ad model. NPR has those audio sponsorship ads that I think connect well with their platform history.

And then finally thing third point I'll mention is the one that gets written up a lot in not particularly well-informed opinion pieces about the future of journalism. Do mobile devices fundamentally change the paid content equation? Are people going to be willing to pay for things on an iPad or an iPhone that they were not willing to pay for on the web? Or, at least that they thus far have not shown any willingness to pay for. The Wall Street Journal has announced a really substantial high price for access to their iPad app. The Times hasn't made their announcement yet, but the buzz at least in the weeks from midtown Manhattan seems to be somewhere around \$10 to \$30 per month, depending on who wins a variety of internal battles. Who knows if that's true. Maybe Tom can talk about that. Personally, I'm more than a little bit skeptical that the presence of new devices by themselves is going to suddenly turn a bunch of passive web consumers into people who are just desperate to send money to major news corporations. It wasn't that long ago that the Kindle was the savior du jour for the news business. Will the Kindle save journalism? How many headlines did we see that were some variety of that? I'd be surprised if the iPad is going to be anymore effective at

being a source of salvation. But I do think that these new devices, on a more creative end of things do really allow for possibilities of building new kinds of immersive and engaging experiences in a way that could be a way to recapture the mindshare of Americans and folks elsewhere.

There are a couple of statistics that I keep coming back to that I think really are telling about the opportunity with these devices. One was a piece of research by Forrester that found that 70% of all the content consumed online by people under the age of 40--not teenagers, but people under the age of 40--70% of it was created by someone they know. That's a big transition from in the old world where the only people who were allowed to create content were corporations designed for that purpose. And the other statistic is that, according to the most recent numbers I saw, about one percent of all the time spent on the Internet in the United States was spent on newspaper websites. One percent. If you add in CNN and other websites, it grows a little bit, but not a whole heck of a lot. I think that the opportunity of building a great iPad app or something like that is the chance to create an experience that's good enough and valuable enough and engaging enough that people might want to spend a little bit more time living in the news sphere that we've tried to create.

So that's a very quick overview. Let's just go to our panelists. I'll introduce them all quickly and then we can move along to talking about them and having them each give their presentations. They'll each come up here. John-Henry Barac is a digital designer and a consultant to The Guardian. He was the main designer on *The Guardian* iPhone app, which is, I think, one of the more interesting apps in the space. I did a lengthy interview with him for the Lab about his thoughts on the possibilities for iPad news app design. Next to him is Tom Bodkin, who is Assistant Managing Editor and Design Director for The New York Times, who's been involved in all the design choices in this move to digital. He will have lots of great things to talk about there. I have an old listing of the people who are here, so I can say that Dan Treinish is the Director of Content Acquisition and Business Development at Skiff, who is going to talk about the possibilities of creating platforms, as opposed to living on somebody else's. And finally Kinsey Wilson is the Senior Vice President and General Manager of NPR, who has been very much involved in their digital strategy.

So let's start with John-Henry. Come on up.

**John-Henry Barac:** Give me a moment, folks. I just need to set up and present a display, as in reality I wasn't prepared. [Sets up display.] It might be easier if I use my laptop. I'm sorry. [Some discussion about how to set up the display.] Thank you, guys.

Joshua Benton: The challenges of digital journalism.

[Some laughter.]

**John-Henry Barac:** So which way around, over here? [Some technical difficulties. Some discussion about it.]

**Joshua Benton:** This gives all of you a chance to explore the news applications on your phone or iPad, [some laughter], explore the mobile Internet.

John-Henry Barac: Can you see that?

Joshua Benton: Yes.

John-Henry Barac: Does it squeeze my type?

Joshua Benton: Yes. Oh, well.

John-Henry Barac: OK. It squeezed my type, so we'll just have to... Oh,

god. [Technical difficulties. Discussion about what to do.]

**Rosental Calmon Alves:** OK. We're going to switch the presentation.

[More technical difficulties.]

Joshua Benton: Let's try something basic. Dan.

Rosental Calmon Alves: Dan, come on, Dan.

**Man:** Let's skip right here to the very straightforward.

Dan Treinish: OK. Overhead projector. Does anyone have an overhead

projector?

Rosental Calmon Alves: OK. So now we'll start.

Dan Treinish: OK.

Joshua Benton: All right. Let's get started, everybody.

**Dan Treinish:** Hi, everybody. Sorry about the technical difficulties. I'm sure we'll get that straightened out in a moment. My name is Dan Treinish. I'm Director of Content Acquisition and Business Development at Skiff. I just wanted to thank Professor Alves and the school for inviting us and including us in this conference. It's really important for us, and we certainly appreciate it. What I'd like to do in the context of our topic today is give you an introduction to Skiff and our company and our strategy, because I think it really is a unique way of looking at delivering news out to mobile devices. And what we're doing is very exciting for us and for all the publishers that we've been working with so far. [They] are equally excited. And so I'll just

jump right in and give you a basic introduction, walk you through a few slides about how we work.

So Skiff is an e-reading service and store. It's a full ecosystem optimized for newspapers and magazines, but including books and blogs as well. We're working with top publishers hoping to leverage their promotional strengths and of course their content to deliver e-reading versions of newspapers and magazines to any mobile device. The key notion of our strategy and our value proposition to publishers is that we're able to [it] in a way that really minimizes work flow and overhead demands on publishers to create a consistent and authentic look and feel of a publication across multiple devices. And that's really the theme of what I'll be talking about, and I'll get into that in a little more detail in a moment. The other key notion or element of our platform is that it creates a new form of advertising. And I'll get into what that means as well in a moment. And so when we launch later this year in the third quarter, we'll be distributing newspapers and magazines and books from major publishers across the U.S. to a wide range of mobile devices—phones, tablets, computers, and dedicate e-readers. And I'll talk about that in a moment as well. This is really just a visual representation of what I've been saying.

Our feeling is that you should be able to take whatever you want to read wherever you go and be able to read it in an authentic way and not have to compromise the experience because you're going mobile or because you're using a different mobile device. There should be a consistency of experience. And the way that we're enabling that for all these types of documents and publications is through either an application framework or a dedicated operating system. So for your tablet, smartphone, netbooks, PCs, laptops, it'll be driven through a Skiff application. And whether that's an application that comes preloaded on a device or it's an application that a user pulls down for free and sets up the application on their particular device, whether that's an Apple operating system, Android, Windows, we'll have Skiff applications for all of these platforms. And so if a user wants to access their Skiff subscriptions, the subscriptions that they purchase through Skiff or purchase additional subscriptions, they go to this app and transact there and experience and read their subscriptions within that application. Certainly, there are interesting dedicated e-readers coming to the market as well this fall, and for a variety of them, since they are really just one big app, the sole operating system will be Skiff, and we'll be delivering to those devices as well.

In terms of devices and the application, thinking about it from an application point of view, there's two different ways to do that, right? When you get your iPhone, it comes preloaded with a set of applications, and often those are some of the ones that you use the most. And so following that model, we're out doing deals with major consumer electronics manufacturers who see an opportunity here, who want to get into the e-reading business with newspapers and magazines, but don't necessarily want to be in the business

of doing content deals, developing compelling e-reading software, an e-reading store, an e-reading brand. And so they are excited to hear from Skiff and to partner with us, because we're basically able to port our entire platform to other devices in an application framework. And so with companies like Samsung where we recently announced a deal at CTIA, when you buy certain Samsung phones and tablets and potentially e-readers in the near future, the preloaded primary e-reading application when you turn on the device will be Skiff. And we're hoping to announce other similar primary e-reading application deals down the road. But again, as I said, if your particular phone doesn't have—or tablet or computer for that matter doesn't have Skiff preloaded, it's easy to go and pull down that app and enjoy your Skiff subscriptions.

And how did we get here? This is an interesting slide from a lot of perspectives. And these are numbers that I think most people in the room are familiar with. But Skiff was incubated as a startup by Hearst about three years ago when the feeling was that there was going to be some transition in the markets and that there's going to be more out there than the web. And then on the print side--it's no secret that there's been some decline. But if you look at these numbers, you know, magazines, newspapers, 45 million daily readers, that's still significant. That's a big number. And when you look at the opportunity to offer these readers a new platform to engage with their papers and their magazines and their books in an authentic way, it's a great opportunity for us. And this was the genesis of the company, and we took that to the next level.

When we look at our business model and you look at the migration of ad dollars to the mobile space, estimates vary, but everybody knows, and as we heard a little bit earlier, it's rising quickly. And then if you look at the migration away from print, what we look at is even if you just take a fraction of those readers that are migrating away from print and convert them to a digital platform, and you marry that with, let's say, a percentage of new subscribers, the numbers start to grow pretty rapidly. And these are numbers that we're getting from our own internal research, as well as from external research firms that show the e-reading opportunity to be fairly significant in the next few years. And when I say "a portion of new subscribers," if you look at existing e-reading services for periodicals, by some accounts, up to 50% of the subscribers are new. And this is a really important statistic to consider. There are people subscribing to... Some newspapers are seeing 50% of their subscribers in their e-reading versions as new subscribers who had never subscribed before. So we look at that along with a sliver of the defections as a significant opportunity to drive growth.

And this is where we see it happening. Again, in a slide that we're all familiar with—e-readers, smartphones, tablets, netbooks, laptops. Taken together, it's a huge addressable market. And we aim to get our platform out on as much of these devices as possible to give publishers the reach that they

need, again, without incurring significant overhead, without incurring additional workflow. I'll talk about that in a moment.

But I really want to talk about today primarily is the notion of authenticity, which I think is important when you talk about the mobile space. Coming from a publishing company, one of our missions has always been to be publisher friendly. And that means a lot of things. It means economics. It means, as I said, sustainable workflow for publishers. It also means taking that brand that's taken so long to develop and extending that in an appropriate way across multiple devices. It's not something that you want to lose just because you're in a new market or you're on a new kind of device that you may not have worked with before. And so what we've been able to do with our platform, on the right side, you'll see this is just a generic ereader, but this is actually how our software renders an e-reading version of the newspaper. So if you look at *The San Francisco Chronicle*, for example, all the things that a reader instantly recognizes—the brand, the layout, the typography, certainly the story selection, the job of the editorial team to layer in stories to places for discovery so that readers see things they didn't even know they wanted to read—those are things that you don't want to lose.

You're not going to be able to keep all of it, but what we're providing is a way to retain some of this organization and navigation. You know, whenever I get The New York Post, I turn it over because I know that's where the sports page is. You may know that there's something on Page 3 that you're going to want to read every time you read your paper. And there should be a way to replicate that in some way. I'm not talking about a one-to-one representation. If you look at the printed version, The Chronicle on the left and the e-reading version on the right, it's not the exact same thing. We're not talking about like a snapshot or a PDF, but what we're talking about is a new version that retains all of these elements in a new way, so that it can be distributed across multiple platforms. And certainly advertising is part of the reading experience for newspapers and magazines, right? That's something that people expect to see in a magazine and a newspaper. And it's a revenue stream that publishers certainly don't want to lose. So what we're creating is a new form of advertising, not necessarily a snapshot of a page that might happen to have advertising, but really new formats, new specifications, advertising that has its own attributes and hopefully its own value for buyers, as we scale in the marketplace over the next couple of years, that can be sold as its own category.

And so when you look at this, this is clearly to a reader of *The San Francisco Chronicle*. This is their newspaper. Now, as you get down to smaller devices, to phone size, obviously, you're not going to be able to retain all of this. You know, there are only so many things that you can show on a three- or four-inch screen, but our mission and what we've been able to accomplish is to take some of those cues to every screen size, some of that DNA from this newspaper or magazine and translate it to smaller size factors. Again,

minimizing workflow on the publisher side. We're doing the heavy lifting to distribute it out to multiple device size categories via a set of templates that are specified when we set up our relationship with a publisher. And when I say "templates," it sometimes implies kind of a lack of flexibility, but I can assure that this paper looks entirely different from *The Wall Street Journal* or *The New York Times* [and] how they will look on our platforms. But it's this templating system that gives a set of instructions to the feed that we get from a publisher and informs the feed how to sort of assemble itself on a different size device and different screen size. I'm not going to get too far into the weeds and the technical side of things, but really the mission is to minimize the work of the publisher, take one feed in and distribute it out to multiple devices. And certainly, one thing I forgot is that because it's a digital device, of course, there needs to be a capability to have dynamic updating. It's not the every-30-second-updated feeling of a website. It's still an article, but you need to have that capability.

And so this, again, is just a summary of what I've been saying. We want to simplify life for publishers, take in a single feed, marry it with designs and templates pre-specified by a publisher, bring in advertising from the publisher, and distribute all of that out as a fully formed publication to multiple device types and multiple devices. Oh, yes, and the key really is to maintain that consistent look and feel across all of those devices. And so when a publisher has a relationship with Skiff and is distributing publications, newspapers, magazines across all these devices, a publisher can be assured that that consistent look and feel that was pre-specified will be replicated across all of these devices, which we think is important.

In terms of advertising, again, the goal here and what we're working closely with publishers on is creating a new form of advertising. There will be interactivity tracking as we get into this. And certainly as devices become smarter and more location aware, there's the ability to target based on location and behavior. What are people reading? What advertisements are they looking at? Certainly, we'll be reporting back to publishers what articles and how long they're reading them, what advertisements they're looking at, how long they are looking at them—all part of the data that we'll share with publishers. And so the notion, again, is that this is a new kind of advertising, a new platform where we hope to minimize our presence on the business side, but allow our platform to deliver out this kind of advertising to newspapers.

And this is a slide that we typically use to provoke some conversation. It's really a look at the landscape out there for e-reading and the types of devices that we're going to distribute to. So on the right side, you've got your dedicated e-readers, right? We all know what they are. They are single purpose, primarily driven by E-Ink. That's the operating system. It boots to e-reading--very successful for books. The newspaper and magazine experience to date hasn't been a rich experience, but you're seeing a significant uptake in some instances, so it shows an appetite for these

devices. And certainly in the face of the launch of new tablet devices, the feeling is, well, there's going to be a market for e-reading--dedicated e-reading devices. There's going to be a certain segment of the population out there who see the value in having a device focused on one thing.

And then on the opposite extreme, on the far left, you've got, you know, your multiple-purpose devices. Billions of these out there in the market—PCs, laptops, mobile phones, smartphones, Blackberry's. And to date, you know, this is the web. And the long form reading here has been more like snacking, right? This is your website and its own set of economics.

And then in the middle you've got this new category that's really been catalyzed by the iPad. And it's not necessarily a new category, right? I mean, there have been tablet devices in the market for a while, but the iPad has certainly done some significant new and great things. But as a result of that, other manufacturers are jumping into the business and have been thinking about doing so for a while. So this year, you'll see tablets, as you all know, from HP and Samsung and all the other major manufacturers hoping to find their place in this market. But to date, there really hasn't been a killer app here, right? No one has really figured out exactly what you want to do with a tablet device. Everyone has some interesting things they like to do, but it hasn't been that killer app yet. And the feeling is that e-reading could be one of those or, you know, it doesn't have to be one app, it could be several killer apps, but e-reading could be one of them. And we'll have applications, as I mentioned, running on all these tablet devices, whether it's that primary delivered when you open the box Skiff e-reading application or one that's pulled down as a free app. And in fact, we'll be across all of these categories.

And what I tell publishers is that you want to be in as many places as possible, but you want to also maintain a little bit of that control through your brand and through your direct relationship with the reader. We think that's something that's important not to lose with new platforms. It's taken a long time to develop that relationship both in terms of your company and your publisher's relationship with advertisers. And so what we want to really do at the end of the day here is extend the publisher's relationships with their readers and their advertisers across this new platform and across all of these devices.

So that's our basic story, and thanks very much for giving me the opportunity to present it to everybody here.

[Applause.]

Joshua Benton: We'll have a smooth transition.

**Kinsey Wilson:** OK. Wow. OK. Good morning. We've had a lot of fun in the last month scrambling, frankly, to get our iPad app ready for the April 3<sup>rd</sup> launch and so forth, but we have been thinking about mobile for a much

longer period of time. And as we've looked at it strategically, our approach to mobile is informed in part by the goal, maybe even the mandate that we feel to provide free and universal access to the news and information that we have historically provided. That has interesting ramifications for the business model around these various platforms, and I'll get to that at the end. [I'll] come back to that.

But as we began looking at the mobile space, I suppose, you know, I would even go back to the advent of RSS when it became evident that content was becoming more distributed. Wireless was becoming more and more prevalent. The ability to stay constantly connected was increasing rapidly. And it was clear that we were going to go into a phase, which I think we're in now, of device proliferation. That there were going to be more and more ways to consume this content. So with that in mind, our approach was, first and foremost, to sort of lay the foundation for what was a very uncertain, unknown world at that point. And that was to create an open API. And we did that, an application programming interface that would essentially provide a gateway, if you will, into all of our content.

We did it with a couple of purposes in mind. One, the obvious one is to achieve wider distribution. As destination sites diminish in importance and distributed content assumes greater and greater importance, this potentially provided a good mechanism to get our content out there. It was also a way of supporting our member stations. There are 286, I think, member stations within NPR, under the NPR umbrella, and this was a way to make our content easily accessible to them. It provided us internal flexibility in terms of responding to these platforms, but perhaps most important [it] also served as potentially a stimulus for innovation, giving other people outside of our shop an opportunity to experiment with using our content and developing applications. And I'll show you an example of how that played out.

The impact of that has been fairly pronounced particularly since we began running all of our websites and mobile applications and so forth beginning at the end of last July off of the API. So part of the purpose there was to demonstrate that this can scale. This becomes a more important platform for the distribution of all of our content. We can actually support something at a level of volume. And so we are seeing currently about over 50-million requests per month from the API, and we're serving over a billion pages. And this actually understates the total amount of content that we're serving, partly because some of the users of the API actually cache the content on their side and it doesn't include that.

How this played out in the mobile space was we woke up one late December morning in 2008 and discovered that a guy in a garage, a volunteer firefighter by the name of Brad Flubacher had created an NPR iPhone app, unbeknownst to us. He got a key to the API. He checked off the terms of use. He complied with them, developed the app, pushed it through the store, and there it was. And that, in fact, was part of the intent in developing the API.

We hadn't had the resources at that point to undertake that development ourselves. It has also since then led to Symbian, now the Symbian Foundation, which was spun out of Nokia, approaching us and asking if they could develop an app off of the API for us for free for distribution of our content primarily in Europe. Then after that a Google developer approached us and asked if he could spent his 20% time, the day that Google affords them to work on their own projects. He was an NPR fan and he wanted to develop an app for free for us. So it's stimulated all kinds of development that, frankly, would have taken us longer and would have cost more for us to undertake on our own. In the case of Google, the opportunity for him was to be able to interact with us without a lot of friction, to be able to simply develop on top of the API without having to have constant interaction with us. Though, as it turned out, he was very willing to take some guidance in terms of design conventions that we'd developed and so forth.

All of this prompted us to accelerate our efforts to develop our own branded iPhone app which launched last July and pretty quickly ascended to — it's ranged anywhere from the number two to the number five app within the news category within the iPhone store. We spent a lot of time sort of figuring out what the architecture of this should be. And as you can see from the tab icons on the bottom, [we] chose to divide it into news, programs, stations, and then playlists. And what we quickly discovered was that this is really an ideal platform both for reading and for listening. And it was one of the first opportunities in the digital space for us to take advantage of what's at the core of what we do and really open up additional possibilities and opportunities for listening. We saw 10X growth very, very quickly in our overall mobile traffic when we launched on this platform.

So in addition to having apps in the Android store and in the iPhone store, the other main thrust has been to reengineer our mobile website and do that in a way that allows us to pretty much address all the other platforms that are out there. So to the question that Joshua posed at the beginning of this about, how do you make the choice between which platforms to hit and where to make the investment, we've essentially said we're betting on Apple, we're betting on Android. We think that they have the best opportunity, by virtue of Apple's first-mover status and perhaps the design integrity that they've put around their process and Android being open source, to become the two commanding sources of apps. And everything else we're planning to address with the mobile web, essentially through the browser. That means that on the Blackberry platform, we've elected not to develop a Blackberry app. Part of that is specific to us, but it applies to others. I think Blackberry has four, five, or six different OS's and you've got to match what you do to those various OS's. And in our case, where we're serving audio and serving over a thousand streams that we don't personally and individually control they come from our member stations—the challenges of presenting a quality audio experience on those disparate platforms just has too high a cost attached to it. So we found that we're able to detect for whatever the OS and

the browser version is on these different platforms and present as high a quality mobile web experience as possible.

We have also—and I won't dwell on this—we have used the API to help stations create a much more robust web presence in their markets, and that's something that we will continue to work on. We are also now helping them take their content and put it into our API, which then opens up the possibility of their content being extended not just to audio, but other content being extended to these mobile platforms. And if we can geocode the data and detect where you are, we have the opportunity to put together a fairly powerful network of content that is both national and local in scope. The use of the API and NPR content by local stations has resulted, in the few cases where they are doing it fairly aggressively, in fairly dramatic growth. About 300% in the case of WBUR. Starting off a relatively low base, but growing fairly rapidly.

So the iPad comes along and, you know, in the case of the iPhone, we waited a couple of years, frankly, to get our app out there. And we had to make a decision as to how quickly we were going to move. We decided that in sort of looking at all the advanced press that this was important enough that it was critical for us to be there Day 1. And we chose to do two things. Not simply design an app for this platform, but also reengineer our website so that it would be optimized for this platform. And I'll talk about both aspects of that.

The reason that was important is because we felt that your positioning in the app store, on the one hand, provides exposure to an audience that may not be familiar with your brand. If you're one of the top two or three news applications in that store, people are going to find you. You're going to begin to build audience in ways that you couldn't entirely on your own. On the other hand, this is a device that supports a browser. People are going to be using social media, they're going to be using email, they're going to be using links, and finding your content through all those mechanisms, and you need a credible experience in the browser when they click on that link.

So two things that I would mention, starting first with the app. I'll go back to the homepage here. Oops, too far. We elected not to go with the sort of standard newspaper grid, which you'll see in most print companies, but also companies like Reuters adopt in this environment. It can be very effective. We felt there was an opportunity. These are each individually swipe-able elements that you can go past, and you can swipe the individual pages as well as the icons and the tabs along the bottom. We thought it was important to be in this environment, partly because it's incredibly tactile. Whether Apple emerges as the dominant force in this space or somebody else does, this kind of interaction, I think, is genuinely a breakthrough in digital computing. It's much more intimate. From our standpoint, it's very conducive to listening and reading simultaneously, even more so than on the phone. The speakers on this device are remarkably good. And so we felt that we wanted to be able to experiment with that as early as possible, anticipating

the fact that HP and others are going to be coming out with devices downstream.

We also chose to change what we call the sponsorship [or] what you would call the advertising experience within this environment. And we actually do launch what in a web environment would be termed a full-page interstitial, but actually it doesn't have that interrupted feel in the same way, because it's only associated with the audio, and it plays a ten-second pre-roll in front of whatever audio you're listening to. Something that our listeners are very accustomed to. And the visual display is just a companion to that and can be closed.

On the website side, there were two key things that we had to do. All of our audio is presented in Flash, so we had to convert that to HTML5, and again we chose to launch a completely different ad experience in this environment. So rather than banners and impressions, we use something similar to what we're doing in the app. And we also put a persistent player along the bottom in HTML5, which we don't have on the website. There's not a lot of audio listening on the desktop and the laptop, but we think there is in this environment, even in the web environment, and so we wanted to make that a more prominent part of what we did. We were able to... Because we've separated content and presentation, we were able to prototype this in two weeks. Basically, our developers got a very credible working prototype up and running inside of two weeks, and then we used another three or so to mainly do Q/A and refinements on it.

I mentioned I would come back around to the business model. Then I'll close. I too am skeptical that this is going to be a salvation for traditional media or traditional publishers. If it is, I think it's premised on an assumption that somehow we're going to be able to stop the revolution that's occurring in advertising as well as the revolution that is occurring in media. And as much as Apple has created a very self-contained and relatively closed platform in Internet terms, it's still pretty wide open. It is open to the browser as I mentioned. And having used it now for-whatever it is-three weeks and traveled with it for a week, it's a remarkable engaging device and one that you use in a variety of different settings and fundamentally gives you unbridled access to the Internet. So I don't... It's hard for me to imagine, except for the business-to-business publishers like The Wall Street Journal and others, that a subscription model around this is really going to work, particularly when not just us but Yahoo and CNN and others are making their content available for free on this platform. So we'll see how that plays out. And maybe that's something we can debate and discuss as we go further here. I'll leave it there.

[Applause.]

**Joshua Benton:** We're abandoning our iPad presentation?

**Tom Bodkin:** Yeah. Given the subject of this panel, I was going to use iPad's very good Keynote application and present it on the iPad. But given the problems we've had, I think I'll play it safe. I also wanted to say that, you know, the quote that you saw from *The New York Times* about the Demand Media, I had nothing to do with that quote. [some laughter] [Setting up his presentation.]

**Joshua Benton:** We're going to do some group interpretive dance over here.

[Laughter.]

**Rosental Calmon Alves:** Anybody have a question?

Man: Sure.

Woman: [Inaudible.]

Dan Treinish: Yes.

Rosental Calmon Alves: Can you repeat the question?

**Dan Treinish:** The question was, does the Skiff platform handle video? And the answer is yes. I mean, a video or an audio file might not necessarily be part of an XML feed from a publisher, but once received by other means, we can certainly deliver it out to a device that is video capable, sure.

Woman: It would be on the player?

**Dan Treinish:** No, the player would be on the device.

**Nathan:** I have a question for Mr. Wilson. My name is Nathan. I work at an NPR station here in Austin. We're trying to figure out how to take a bunch of audio journalists and get them to start doing all sorts of stuff for the Internet as well. I wonder how important... You know, you said not a lot of desk...[inaudible]. How important is your audio product to your online presence? How do you go about this? I know some of the ways you distribute it, but can you talk a little bit about that?

Kinsey Wilson: It clearly has been... Well, NPR and Franklin member stations themselves were slow to the Internet. I think in part because of the difficulty of creating rich content for the web out of a radio organization. I mean, writing text is a multimedia act in a radio organization. So you don't have what a colleague of mine calls 'the plot factor' that you have in print, which is to be able to take sizable part of what you're doing and just move it over. That may not be the best web experience, but at least it gives you a baseline foundation. And truthfully, most radio sites were companion sites to what was happening on air. It's only as we've really ramped up the

production of text in our newsroom that we've been able to sort of position ourselves into more credible daily destination for news on the web. We think stations have the same opportunity in most markets, but it does take brick-by-brick building. What's interesting about this is, is that these platforms, both the smartphones as well as the iPad, are much more conducive to listening and essentially allow you to extend the listening day and not just catch people when they are in their cars and their kitchens.

**Joshua Benton:** All right. We've achieved iPad presentation success with the computer.

Tom Bodkin: Doing it on the iPad, so it works. So when you're talking about mobile news, it's important to make distinctions between the various categories of devices. Each one of them holds an important place in the media ecosystem, but their impact on journalism varies with their various forms and functionality. Starting with the e-readers, basically I believe that e-readers will fairly quickly evolve to the point where there's little distinction between a reader and a tablet. There's no reason technically why the two can't be combined, the benefits of both in one machine. Right now, the e-readers are defined by their E-Ink display, which is a technology with a great benefit of extremely low power use and a pretty readable display. But the low resolution of that screen and its limit to black and white, and the slow refresh, along with a somewhat awkward navigation, it limits our ability to present sophisticated visual displays. *The Times* has applications running on most of these devices.

There you've got the Amazon Kindle. It is highly readable. It's a fairly basic display, a single column, [and] the topography is generic, but as a device to read on, it's pretty good. The navigation is through a button, a toggle and a button, which is workable but a bit slow. The Sony Reader actually has a touchscreen so the navigation is a little bit better or a little bit easier, but you're still limited by the E-Ink screen. And the Barnes & Noble Nook sort of did this strange merging of an E-Ink screen on the top and an LCD screen below. Below, you do all your navigation through the LCD screen, which works, but again is a little bit awkward. Smartphones are incredibly convenient. They're great for quick hits of news and information wherever and whenever, and you can't beat having a device at hand and continuously connected at all times, but its small size limits its ability to present the best of journalism—the telling of complex and compelling stories through word and image.

So our app on the iPhone is a very simple, efficient presentation. There's no ornamentation. It's a simple list. There isn't much in the way of hierarchy and few visuals, but it's a very efficient way to consume news. We also have a real estate app, which actually really shows off the potential of a smartphone. Smartphones and service journalism are a great pair. So the ability to search and filter and use geolocation makes the smartphone great for finding an apartment. So you see our app. You search for apartments

within a neighborhood or within a price range. And you can, you know, get details of the apartment and you can get maps.

Now we get to tablet computers, which I believe are a whole different game. They've got the potential to completely change how our journalism is presented and consumed. They allow us to return to what we do best—narrative storytelling—while at the same time exploit the incredible power of electronic distribution and display. I'm hoping that the tablet, a computer you can hold in your hand with an Apple canvas and easy navigation, I hope that will create an appetite for content that is less, quote, "webby." A platform for the more relaxed, but structured forms we are accustom to in print media.

Last year, I did a presentation at an internal conference where I noted that it was important to understand why in a world that offers ubiquitous access you can get the entire New York Times and a lot more online for free—there's still quite a few people who are willing to cough up as much as \$800 a year for a subscription. So I tried to define the qualities that continue to make the print experience so appealing. What I did was I identified six basic attributes of print that are largely absent from the current online experience. Newspapers are convenient. They are mobile, easy to carry, easy to share. They are reliable. They are adorable. They are disposable. And newspapers have a clear structure. The content is organized by subject. There's a narrative flow, a beginning and an end. You know where you are in the newspaper. You know what you've read and what's left. And they can be fully consumed. You can actually finish a paper. And then there is serendipity. The manageable quantity of content invites perusal, which in turn allows for discovery. You don't have to know what you're looking for. You come across things that surprise and delight. Persistence. A newspaper can be put aside and returned to and it will not have changed. You can save it. And it has daily frequency. The papers arrival or its ability is predictable. It occurs on a regular schedule. There's a new one every day. And this builds habit, anticipation, and it gives you something to look forward to. Finally, there's a quality I could only think to refer to as 'thingness.' The paper is an actual physical object. It has boundaries. It has a distinct identity. It's not ephemeral. It's not ever changing. It has a place in time, a history. It's today's paper.

And I believe that with the right hardware and software, there's no reason the deposit of experience of ink on paper can't be replicated on electronic platform and also combined with the unique opportunities offered by digital technology—motion, interaction, links, immediacy, social networking. The challenge is to find that right balance. If you add too many digital options, you risk subverting the more directed reading experience you're trying to create. I believe that the business model as its potential is to achieve what has thus far been elusive on the web, at least for us, which is a long-term engagement.

We've got what's considered a very successful website. There are 20-million unique visitors a month. But the average time spent is only about 15 minutes a month. For the print paper, that number is about 45 minutes a day. There's a big difference there.

Our most significant attempt to synthesize the best of print and digital began about six years ago when we developed something we call the Times Reader, which was an electronic—it still exists—an electronic version of The New York Times, then using Microsoft's new display engine that allowed for a much more sophisticated rendering than conventional browsers. While at that time—this was, you know, 2005 or 2004—tablets were not all that prevalent. They're still not all that prevalent. But the application was designed with tablets in mind. It was designed as a downloadable version of the entire paper created directly from our web feed without any human intervention and fully functional offline. The Times Reader is organized thematically and geographically like the paper. It's paginated as opposed to scrolling like a website. The pages are quite simple with little to distract you beyond the story at hand. There's very easy navigation, story by story, section by section, or just page by page. And it used our own typography that reflects the newspaper's identity. And there's also a dynamic flow of type, so the presentation adjusts to screen size and orientation. This product is out there. The average time spend on a Times Reader is about 15 minutes a day, so it's much closer to print.

I'm going to show you. This is the device. It's a Fujitsu tablet PC that I purchased six years ago now when we first started thinking about the Times Reader. And this is what I really worked with when developing the Times Reader. It's basically a small laptop. It's got a flip-over touchscreen that turns into a tablet. So you see there it's opened just like any other laptop with a small keyboard, but you flip over the screen. There you go. And it becomes a tablet. And it is a touchscreen. It's a pretty great machine actually. And if there's time, I can try to show you a live demo. There probably won't be time though because we're stuck. So the Times Reader, you know, presents the paper. I'm going to go back a screen. That's a story presentation, and another story. This is something we call News & Pictures, which is just a huge slideshow of every image that we produce on any given day that you can just slide across and touch if you're interested and you'll go directly to the story. You see on the side is section navigation. We've got a crossword puzzle. And this is a different view that we offer in the Times Reader, which is live like the NPR site that's on the iPad now, where you can scan across horizontally story to story or up and down subject to subject.

So now to the iPad. With its elegant form, its long battery life, and its responsiveness, particularly its multi-touch navigation, the iPad takes us much further along this path. The application that we currently have available on the iPad is free and it's limited to a small selection of stories from only five sections of the paper: news, business, technology, features, and opinions. Our intent is to expand it to our full content, to enhance the

navigation, and to charge for it. Here you just see how it adapts to different orientations. Of course a touchscreen, a very sensitive one. We have interstitial ads on it very much like a magazine. And video is really incredible on this device. So we want to go much further with this and offer, in addition to all of our news content, a straight video feed, you know, [and] adapt what we have on the reader in terms of the horizontal navigation. What I'm hoping for is that with the right content and user interface design, these devices will command the kind of emotional commitment that we find in a paper product. That kind of similar deep engagement. And I believe this could bring significant subscription and advertising revenue. Thanks.

[Applause.]

Rosental Calmon Alves: So maybe another question.

**Joshua Benton:** Questions, yes. Any questions for our colleagues here while we are... Right there.

Man: I was curious, do you have any idea about...[inaudible].

**Tom Bodkin:** You know, we don't... The question is, how does Times Reader play with younger audiences. We don't have that data. As some of you know, while digital should bring you a ton of data, in terms of our operation, it's actually hard to get those kinds of signals.

**Joshua Benton:** There is also the issue of how—which is a big sticking point—how much data Apple will allow the producers of applications to have. That can be a...

**Tom Bodkin:** Times Reader is actually now running on an Adobe base. It runs on air, but that still is an issue.

Joshua Benton: Right. Right. Yeah.

**Man:** Yes, Mr. Bodkin. You said that you believe the iPad [by] Apple will bring in significant subscription and ad revenue. I was wondering what research *The New York Times* has done to see if users won't be put off by paying for a model that delivers ads, because a lot of times it's one or the other and not just access *The New York Times* website through the web browser or access other sites that don't make you pay for content.

**Tom Bodkin:** That's certainly definitely an issue. We don't have hard research that says that. I think I used the word *hope*. [some laughter] And what I... I mean, actually, the Times Reader is not a huge moneymaker, partly because there aren't a whole lot of tablets out there that it makes sense to use it on, but it's done pretty well. And we've done pretty well with the Kindle also. Those are both subscription, paid subscriptions. I think it's never going to have the kind of numbers of a free website, but I believe that

there are a decent number of people who are looking for a different experience than the web experience, and we aim to give it to them. You're right, especially with something like the iPad, where the browser is totally accessible. You've got to differentiate a product. One thing that might help us is we're going to charge for the website also next year. So there will be no totally free *New York Times*.

**Joshua Benton:** I think we have achieved technical nirvana. And let's get started.

**John-Henry Barac:** Good morning. I can still say good morning, since it's in my notes. My name is John-Henry Barac. I was an art director on *The Guardian* newspaper in London, and I left last year in order to pursue digital design. Basically, the first thing I did was to design *The Guardian* iPhone app, which was quite well received, which was good. And I'm going to talk about in very broad terms about design issues and wishes for the touch interface and also a little bit of background.

So basically, I'm going to start by talking a bit about volcanic dust, which very nearly prevented me from coming here. Really up until the last minute I didn't know whether I was going to be coming here or not. But thinking about it, it really reminded me about, you know, the scale of the problems facing the newspaper industry, etc., and how elemental it feels. You know, how the Internet has grown and changed and really changed everything in so many areas. And like the volcanic dust, you know, there's nothing anyone can do about it. You just have to do something about it. You have to research it, find out what to do, and go with it. But actually it offers up many opportunities. But also we've been through much change in the print industry over the years. You know, going from hot metal, in my case, to wax when I started, kind of putting galleys through waxing machines. And even when we first got a Mac in the print shop I was working in, they still used Crock Express then to type out galleys, which we would then cut up and paste up on boards with wax. Now interestingly, a few of us then realized you could do full-page makeup and were very excited about it, but it took our management a long time to realize that, well, to take it on board, because they were scared that they wouldn't be able to literally feel the corrections on the page, because when you paste up a correction, you can feel it on a page. So in a strange sense looking back, I realize that touch was there kind of way back when.

Also, we began at that time to talk about hypertext and what was happening on the Internet and realized that there was something huge going to happen, but again didn't quite obviously realize the impact it would have. Now we get to a stage where I think news sites or news websites are huge, massive things. They were described by... I was at a talk recently that *The Times* creative director did, and he described them as black holes, *The Times* of London that is. Black holes kind of just sucking in. I mean, he has a background as print art director, so he has a fairly gloomy way of seeing it in

a way. But I think it's actually much more positive in a sense, but they are these vast, vast things with huge amounts of data, which actually, you know, are quite difficult to manage. To manage both in terms of management from the production side, but in terms of management from the consumption side. You know, there's just so much you get. When you get there, where the hell do you go?

So maybe I'll just go back to newspapers and the state of newspaper rather than websites. Obviously when newspapers started out, they were just covered in, you know, advertising was everywhere. All over the front page, it was advertising, not print, not articles. And obviously recently there have been far more problems with this. This was a slide which was shown a few years ago round about the time *The Guardian* changed to Berliner. Talking about how print revenues are obviously in problematic decline, but no one really knows when or if the ad revenue on the Internet will take off. And then along came the other bits of change in terms of the huge growth of, well, Apple's iPod, iTunes, various other types of devices over the years and the massive, massive growth of the use of mobile devices. A couple of years ago when I was trying to persuade The Guardian that actually iPhone was the way to go, I kind of dug around with some of the data and saw that over a very short period of time this massive growth in the use of Apple iPhone, the yellow line, and the iPod Touch, the blue line, and the kind of static Nokia and Blackberry lines at the bottom. Basically showing that 76% of use of The Guardian websites at that time was on the iPhone and iPod Touch. So clearly, Touch, you know, and these bigger screens went through dramatic change in the situation with looking at websites on the Internet and at news websites on the Internet.

So in thinking about this, I began to think that actually news organization websites need to be thought of more in the way — broken down in the way of what the newspaper is like. You know, more like a series of planets held in place by this huge orb of content. All the different sections of the newspaper and actually beyond that. There's services, there's the users, there's all these different things, which you can splice together in different ways to put together an app which kind of treats those different types of content in different ways. Or indeed, just take one planet and look at that. This is what we tried to do at *The Guardian* [with] *The Guardian* iPhone app. Tried to find a way of taking the content that... I mean, essentially this is RSS-feed driven. But trying to take that and offer the user different ways of accessing the content from the front and use kind of some slightly different techniques.

So we use these kind of key word overlays. *The Guardian* website is heavily key-worded or tagged, and I think that's fundamentally important to everything that's going on in terms of using web content on these devices. So on this app, you can click on a key word tag and go anywhere to any of these different kind of subjects and dig around within the app without actually having to — in this case, you don't have to leave the front page. You get to look at the different subjects related before you commit to anything.

You can also double tap on the line of images and look at a kind of scroller, gallery carousel, as we call it, which shows you how many photographs are on that particular gallery and a bit about what the gallery is about, again, before you commit. And you can flick from left to right and look at the different galleries available. I also spent a lot of time just looking at using the typographer, rule work, spacing, etc., from both newspaper and the website to kind of maintain the sense of the brand and to kind of, you know, maintain that—I don't know—it's also to give the user something kind of interesting to look at, I suppose, and in this space.

So the use of it is fantastic. Mostly people use it commuting, but it's quite interesting looking at the figures, because it's not just commuting. This is eight in the morning [where] there is a spike of use of the iPhone app. But interestingly, there is also a spike at 10 p.m., which clearly that's not commuting. That's not people commuting. That's people at home that [are] on the sofa or whatever, in bed, whatever, using the iPhone app to look at *The Guardian* website. And that's a clear spike. It's not just one day. It's there kind of much of the time. So a couple of months ago when Steve Jobs presented the iPad, there he was on the sofa, which I think that it's quite clear there is a gap there for this kind of use of these touch devices. I mean, actually, I look at my partner and stepdaughter and stepson and my little, tiny six-year-old son as well, and they spend a lot of time on computers. My partner sits on the sofa of an evening very often watching telly and looking at MumsNet or Google and whatever, trying to plan a holiday or persuade me to buy a house or something.

And interestingly, this was... I don't know where this quote [comes from]. Well, the quote comes from *The Guardian* quoting an MYT source. I don't know who. It talked about Steve Jobs believing in old media companies and believing that democracy is hinged on a free press, and that depends on there being a professional press. So, you know, there's clearly a commitment from Apple as well to ensuring that news publishing is there on this device. And I think, you know, I mean, there's both the crisis on the one hand and the device and the kind of commitment to deliver this kind of thing.

Now interestingly, the iPhone has been — there's been a huge amount of hyperbole about it. You know, everyone is saying it's the next fantastic thing since sliced bread. It's going to save everything, and all the rest of it. But also in the UK, particularly, everywhere I go and everywhere I say to someone, "Oh, the iPad. What do you think of it?" "Oh, it's full of problems, isn't it?" I've heard, "It's got some problems." I've heard, "It's just a big iPhone." All of these kind of words. And these two specific quotes were actually on my way here. Random staff at the airport. You take it out for security and they say, "Oh, that's [the iPad]. Don't you find problems with that?" "No, no, I love it. I think it's fantastic."

And then the other issue which I've come across in both designing for the iPhone and for the iPad is this kind of thing. Around the design of *The* 

Guardian iPhone app, every discussion we had in preparation people were saying, "Well, what is our unique selling point? Can we big up this? Can we do that?" And I just kept saying, "Hold on a minute. We have this fantastic content. The unique selling point in this app is the fantastic content, and it's that we will find good ways to deliver that content. Good interface." And I think what's very exciting about touch, I mean, again, it comes along. I've been doing some work on an iPad app recently. One of the people said to us, "Can't we make it more exciting? I mean, when this kind of carousel moves, can you not add a little glint of something sort of to tell people that something is behind there?" You just think, "You just don't get it." I mean, touch is amazing. I think the iPad and iPhone are both amazing, because you interact so directly with it, because it is so intimate, because you can literally grab news. You can, you know, move things around. And actually, it encourages people to be inquisitive. So you don't actually need to shout at them about things going on behind the scenes, because it's all there. You know, you want people to explore and experiment a little bit. I think there's a lot of exploring to do by designers and because there are issues in the sense that there are a lot of different ways, for instance, to move from one page of content to another. Is it a page? Do you scroll it? Do you do something else with it? How do you handle the space?

I've spent a lot of time kind of drawing grids and thinking about how you handle the space on the iPad. But I also went back to thinking about actually, how have people read over the years? Over the millennia? In the process I bought this, which is quite an old tablet from 2600 BC, which is basically some sort of legal device about the sale of a house or some slaves. I can't remember what it is. But interestingly also, I met on the flight over here a forensic historian who was talking to me about the move from scrolls to manuscripts to codex, and how actually scrolls were abandoned because the codex was more easy to handle, and you could put it in your pocket, and you get it out to more easily access stuff. But also she talked to me about how when manuscripts moved towards printed news or printed this, that, or the other, when they moved from hand-drawn manuscript bibles to printed newspapers, news documents, they found that they had to make it look like the bible, like the previous hand-drawn manuscript, because the familiarity was necessary in order for people to take this up. And I just thought this is fascinating, you know. The codex kind of came about round about the 12th century. So, you know, here we are with the same issues really. We're trying to look at newspapers, etc., and trying to get that familiarity into these new devices. Of course we are. I mean, people want — you want to be able to get readers to take these things up. And the way to start is to say, "Actually, this is a newspaper." But I think there are issues with it.

I think *The New York Times* is very successful with this movement between pages by swiping left to right. I actually find there's a slight issue with columns of text. I'm not sure about that entirely. I think I also like *The USA Today* app, but I think that they have more of a problem, because when you move from pages by scrolling upwards and you have three columns of text.

So when your column ends on the right-hand side, your new column starts on the left. Actually, it's a bit confusing, and it's a bit of a problem for the user. Interestingly, I think that the NPR one I found most comfortable. Now interestingly, NPR isn't shackled by the whole idea of being a newspaper. So they really looked at how do you read, how do you think about the space, how do you move through a story. And I actually just found scrolling through it, it was a much easier reading experience. I'm not entirely sure. I'm not entirely decided on what is the best way to approach these things, but there are clearly many, many questions and many, many — it's like kind of the birth of the railways, you know, many different types of travel and nothing is really settled on yet.

Then there's the other kind of approach where you can, as I was talking about earlier looking at these different planets, take just one planet. This is *The Guardian's* eyewitness app, which is just photographs and captions, and that's all it is. I think that there are openings for looking at much narrower streams of data, so just looking at one particular thing which adds value for the reader of that sort of thing. But I think... I'll just go on for a couple more minutes. I'll whiz through this stuff.

There is also a question for me about kind of — I mean, a lot of these things are to do with RSS feeds essentially and very, very simple approaches to things. I think there's a lot more to explore in the future, but it has many more implications. There are things to explore, like newspaper furniture. You know, in newspapers, we are very used to designing all sorts of navigation, pullouts, different ways of readers to access stories on a page. *The Guardian* was the previous slide. This is—I don't know what this newspaper is. A much shorter read in this case. But a lot of this looks like buttons and it looks like navigation, and really it should be navigation. We design boxes, little different ways into stories. All of these kind of cry out for interaction, and really you are asking the reader to interact. *The Guardian* uses what we call *gizmos*, these small photographs with a caption attached, which is, you know, you look at the page, you can find out a little bit about the story, decide whether to read it, and move on, etc.

And I think in the iPad when you look at it, these do give you opportunities to think about, well, how do you interact? Can you have a popover which gives you more information if you click on a number? Where does that lead you to, etc.? I think it's very, very exciting. I mean, *The Guardian* is full of web trails. Obviously, essentially *The USA Today* front page and *The New York Times* front page are both basically huge amounts of trails. You click on it, you go to a story. So it's a very direct interaction with those web trails. I'd love to see a newspaper app which deals with something as complex as this. It enables you to get a bit of information from every little bit of data there. You know, every bit of that should be clickable. You should be able to find out something from that. Obviously, it's a huge scale of work involved. And again, things like this where you have, you know, those kind of pullout boxes, the gizmos, etc., the contenders. Each of those could give you more

data. Cutouts. You know, things which make you laugh and disrupt the page, which are a bit of levity, which really, I think the iPad is very good for.

And then something else, which [are] some people whose work I've loved over the years, the Eames, Charles and Ray Eames, their film "Powers of Ten." This kind of thing is the sort of thing as well, I think, which you can see in the map app in the iPad. The fact you can zoom in. Now, wouldn't it be fantastic to have infographics, etc., where you could zoom in and get more detail or zoom out and get more information? I think that there's huge projects which people can undertake which will bring great benefits. And obviously this issue has to do with navigation, people finding their way around things. I think that news designers, editors, etc., have to think of a range of different issues around the iPad and the iPhone to make it so that users don't get lost, you know, in the content. It's great having a pleasurable experience. With the newspaper, you know where you are, you know where you've been, and you know your way back.

So I think there are two other issues I want to touch on very, very briefly. One is that I think that there's a lot of experimentation to do. What the world is crying out for, if you like, is software which will enable you to design stuff and not have to be a developer, but have a kind of content management system which enables you a way into the development tools, so the developer can easily take up what you're doing, etc., etc. You know, daily production is very difficult to do in this kind of environment at the moment. And I would hope that Apple, you know, because they are serious about it, will begin to look into this themselves. I think that also there are issues to do with the way newsrooms are organized. I think that platforms aside, questions about the revenue, etc., aside, if news organizations are serious about this, aside from these early experiments, there will need to be thoughts about whether developers stay within the newsroom. You need to have your editors, your designers, your subeditors, but developers need to be part of that picture as well. As well as there is a question of UX and UI design, which some art directors will be good at, some will need to have there will also need to be additional people involved in thinking about user journeys, thinking about the UI, etc. So it really does imply quite a lot for newspaper structures.

And I think finally there is this other issue of sound design. And actually, the thing about the iPad also is, what happens when you turn a page? Is there a bit of feedback about the sound of that page turning? What if you're in one section of the app and something happens which you want to be alerted about? Like in the sports section, a match that you've been wanting to know about, something happens that you wanted to refer to. Can you get an alert within the app? Is there a sound that happens that alerts you to something happening? Or, is there a popup which tells you something? So there are issues to do with sound as well. Issues which we haven't really had to deal with before in publishing.

And finally, I just wanted to say, it's this weird situation which I shall demonstrate, where we're very used to any newspaper, *The Guardian, New York Times*, etc., you go from page to page. We have very much the same conventions, pullouts, box outs, big pictures, small pictures, scale, etc., etc. But no one has come along and said, "I'm going to design a newspaper where you navigate it like this. And I think we are at that kind of stage at the moment, where there are so many different ways to kind of do these things. Standards will have to emerge. People will have to learn from each other. I think it's very exciting what *The New York Times* has done, what *The USA Today* has done, what NPR has done. And I hope that there will be many, many, many more experiments. But I also hope that there will be more thought about serious investment in the kind of structure, etc., which will need to happen if this is to become a serious prospect for newspapers. That's it

#### [Applause.]

**Rosental Calmon Alves:** We have time for a couple of questions.

**Joshua Benton:** If we could keep our responses very brief. I'll start with Dan.

**Dan Gilmore:** Yeah, hi. Dan Gilmore from Arizona State. The news organizations represented here have put a lot of their eggs in Apple's basket. Several of you are, if not already, partners of Apple, business partners, becoming business partners as you start selling your apps. And you all probably—NPR has admitted this today in *The Washington Post*—have contracts with Apple that permit Apple at its unilateral wish to remove your journalism from the applications if it doesn't like anything about what you are doing. Is that an appropriate thing for journalists? Is that an appropriate ecosystem for you all to be participating in?

Joshua Benton: Kinsey, you want to take that one?

Kinsey Wilson: I'll take it. We all have signed the same Terms of Use. What you're referring to is the Terms of Use that are associated with the SDK, Software Developer Kit, that every one of us has to use in order to present our content on the platform. It's far from ideal. When you're in a position to negotiate individually with hosting providers or others that act as intermediaries for your content, typically what you try to do is indemnify them against any claim of liable or something that they might be exposed to because of content that you write. Apparently none of us have been in the position of being able to have enough leverage with Apple to be able to negotiate individual terms. At the same time, the other part of the quote that was hopefully in *The Post*—I haven't seen it—but that we gave them was that we have yet to see any evidence that they are trying to police content individually. Now, we're all familiar with what happened to Mark Fiore and so forth, but...

**Dan Gilmore:** Kinsey, they've ordered German publications to tone down their stuff. There has already been plenty of evidence. And it's not journalism that we call journalism that they have been blocking or requiring to be changed, but this has already happened.

**Kinsey Wilson:** It's a legitimate issue. It's one that we need to be concerned about and need to watch. I mean, there are not any easy answers to it. I would take issue with, at least in our case, the notion that we are somehow favoring Apple or in bed with them. I was very clear in saying we've designed a platform that will hit any device. The truth is they've got the vast share of audience right now. Whether that will last or not remains to be seen, but we are prepared to be wherever the audience is. Not being selective about any particular manufacturer.

Joshua Benton: I'm going to take the last question, which is one issue that came up in several of the presentations, [which] was the issue of completeness. The idea that when you have a print paper...[inaudible]. And *The New York Times* Editor's Choice app, in particular, has a very defined universe of stuff. I mean, the next one will be different, but just for anyone, can anyone talk about the merits or demerits of creating a closed universe of content versus creating an ever expansive black hole where you can just keep scrolling through archives and keeping getting...? Providing the mental reward of saying, "I'm done now. I can go on to my work."

**Panelist:** I certainly think there is an appeal to that, but I think you don't have to choose between the two. You know, certainly on a device like an iPad you can present both. And I think an edited, curated product that has boundaries to it has appeal, but it's still going to have links, and you can go outside its boundaries if you choose to. I think the challenge is to offer both at the same time, and I think that can be done. It's a design challenge.

**Joshua Benton:** All right. Well, thanks very much, and thank you, panelists.

[Applause.]